

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,357,171 B2
APPLICATION NO. : 10/802385
DATED : April 15, 2008
INVENTOR(S) : James V. Miller

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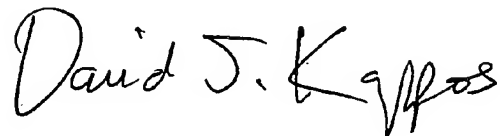
It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Delete title page and substitute therefore the attached title page consisting of the corrected illustrative figure.

Delete Drawing Sheets 1 of 5 and 2 of 5 and substitute therefore the attached Drawing Sheets 1 of 5 and 2 of 5.

Signed and Sealed this

Thirteenth Day of July, 2010

A handwritten signature in black ink that reads "David J. Kappos". The signature is written in a cursive, flowing style with a large, stylized 'D' and 'K'.

David J. Kappos
Director of the United States Patent and Trademark Office

(12) **United States Patent**
Miller

(10) **Patent No.:** **US 7,357,171 B2**
(45) **Date of Patent:** **Apr. 15, 2008**

(54) **LOW-CLEARANCE SHUTTER SLAT**

(75) Inventor: **James V. Miller**, Glen Ellyn, IL (US)

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 31 days.

(21) Appl. No.: **10/802,385**

(22) Filed: **Mar. 17, 2004**

(65) **Prior Publication Data**
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(51) **Int. Cl.**
E06B 3/06 (2006.01)

(52) **U.S. Cl.** **160/235; 160/133**

(58) **Field of Classification Search** 160/235, 160/236, 133, 210, 183
See application file for complete search history.

(56) **References Cited**
U.S. PATENT DOCUMENTS

638,314 A	12/1899	Blades
845,526 A	2/1907	Collins
876,593 A	1/1908	Rush
1,014,315 A	1/1912	McCloud
1,352,656 A	9/1920	Cahill
1,579,839 A	4/1926	Raper
1,776,119 A	9/1930	Johnson
1,892,570 A	12/1932	Ginder
1,918,415 A	7/1933	Miller
2,350,287 A	5/1944	Michelman
2,545,400 A	3/1951	White
2,812,813 A	11/1957	Zarnowski
2,858,883 A	11/1958	Rapin

3,292,685 A	12/1966	Clark
3,431,964 A	3/1969	Rogers
3,489,200 A	1/1970	Recchione
3,670,797 A	6/1972	Sassano
4,037,639 A	7/1977	Jones
4,294,302 A	10/1981	Ricke, Sr.
4,332,287 A	6/1982	Stolpe
4,343,340 A	8/1982	Paule
4,345,635 A	8/1982	Solomon
4,379,479 A	4/1983	Whiting
4,386,645 A	6/1983	Dever et al.
4,519,434 A	5/1985	Forquer
4,611,848 A	9/1986	Romano
4,628,982 A	12/1986	Labelle
4,690,193 A	9/1987	Morrison et al.
4,718,472 A	1/1988	Hormann
4,723,588 A	2/1988	Ruppel
4,738,296 A	4/1988	Hatch
4,795,206 A	1/1989	Adams

(Continued)

OTHER PUBLICATIONS

Lakel Rolladensysteme, Lakel Profil AHS 75 brochure, 4 pages—undated prior art.

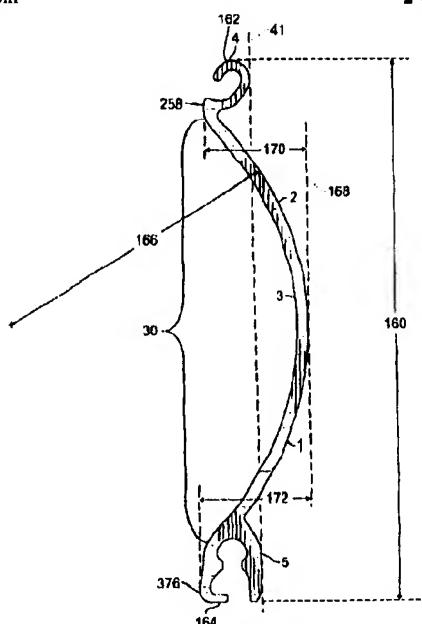
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(57) **ABSTRACT**

A rolling shutter and a slat for use in a rolling shutter are provided. The slat comprises an engaging track located at a first horizontal edge and a receptacle track located at a second horizontal edge. Illustratively, the engaging track has a hook-shaped profile and is disposed at an acute angle, and the receptacle track comprises a lip and a guard defining a space adapted to receive therein an engaging track of an adjacent slat.

2 Claims, 5 Drawing Sheets



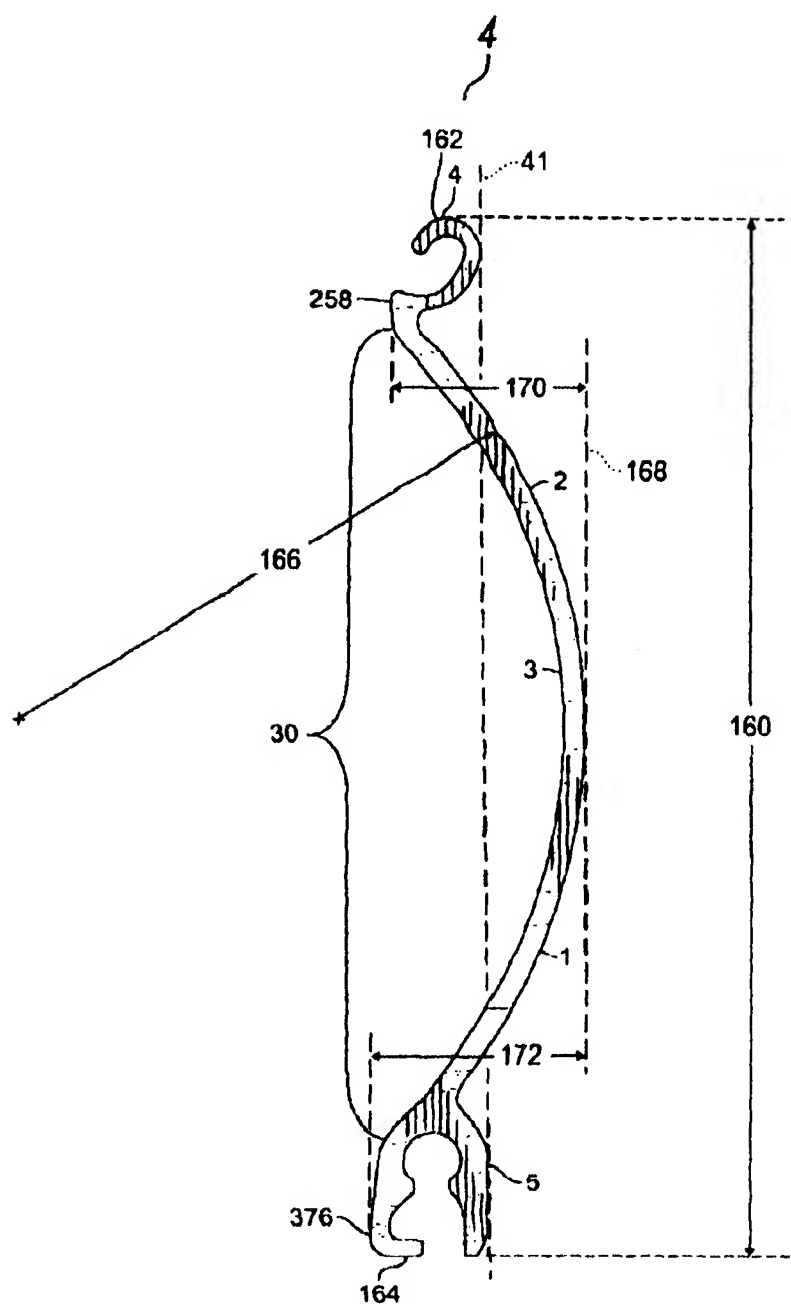


Fig. 1

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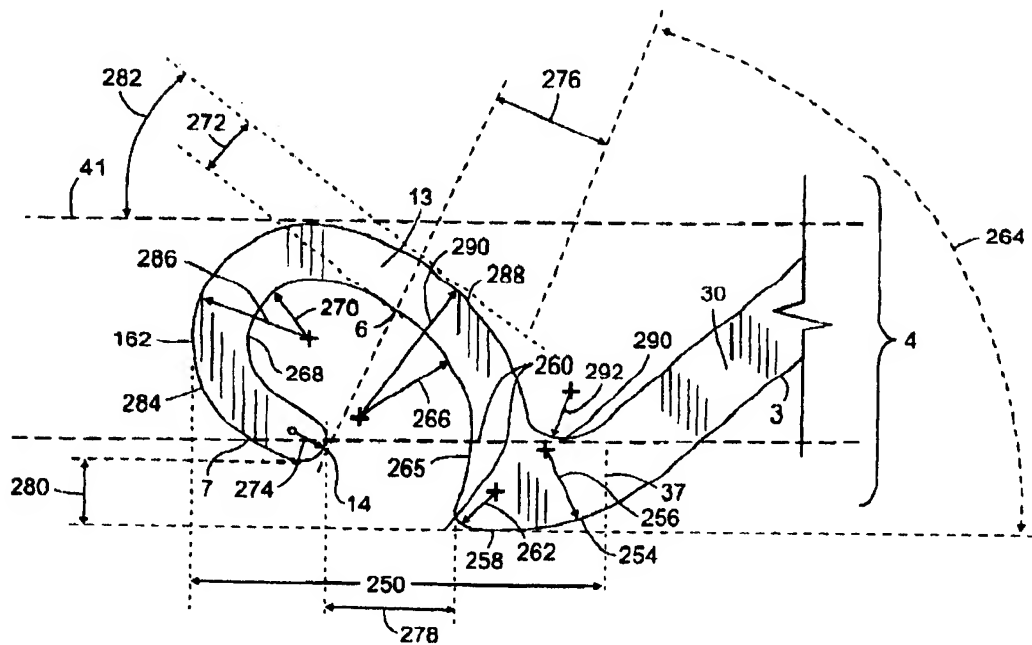


Fig. 2

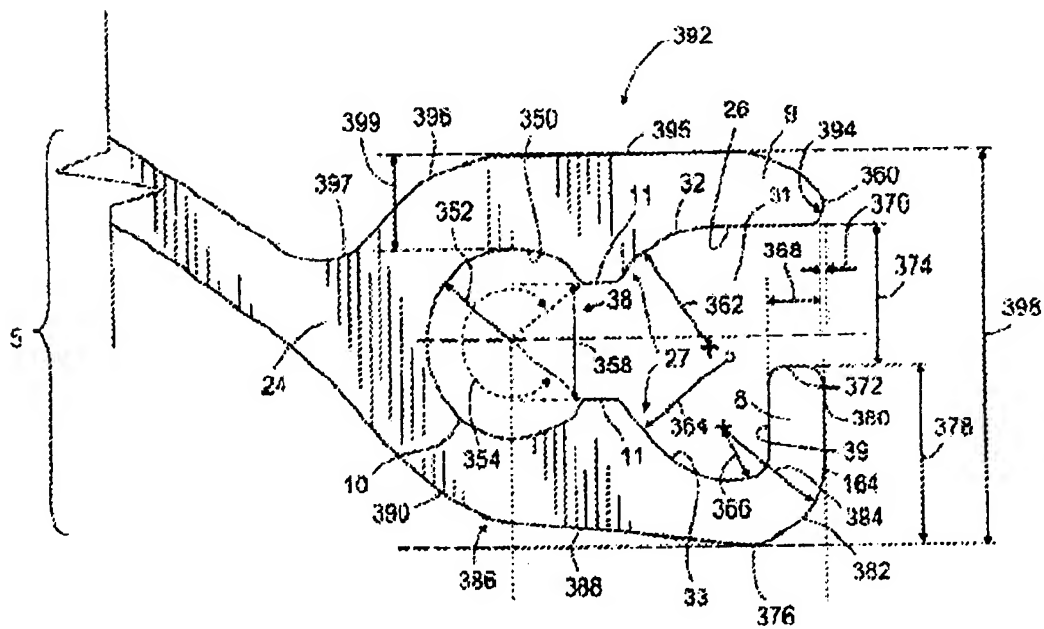


Fig. 3